

Berlin, A. A. and Matveyeva, N. G.
POLYMERS WITH CONJUGATED BONDS IN THE
MACROMOLECULAR CHAINS. III. POLYAMINO-
QUINONES (Polimery s Sopryazhennymi Svyazami v
Tselyakh Makromolekuly). III. O. Polyaminokhionach).
Feb 61 [6]p. 2 refs. RTS 1705.
Order from LC or SLA m\$1.80, ph\$1.80 61-15744

Trans. of Vysokomelekuljarnyye Soyedineniya (USSR)
1959, v. 1, no. 11, p. 1043-1048.
Another translation is available from ATS \$7.50 as
ATS-83M40R [1960] 4p.

Polyaminoquinones were synthesized by the interaction
of chloranil with benzidine or hexamethylenediamine.
Polymerhomologous conversions are possible because
of the mobile halogen atoms in the quinone residues.
When reacted with metal salts, polyaminoquinones
form polymeric complexes, of apparently chelate
structure. The EPR spectra and the magnetic sus-
ceptibility of aromatic polyaminoquinones and their
(Chemistry--Organic, TT, v. 5, no. 8) (over)

61-15744

I. Quinones--Polymerization
I. Berlin, A. A.
II. Matveyeva, N. G.
III. RTS-1705
IV. Title: Polyaminoquinones
V. Department of Scientific
and Industrial Research
(Gt. Brit.)

ATSIJRJ-2461
151669

Office of Technical Services

Polymers With Conjugated Bonds in Macro-Molecular Chains. Part IV. Some Peculiarities of Polymeric Compounds Containing Hetero Atoms in a Conjugated Chain,
by L. A. Blyumenfel'd, A. A. Berlin, 5 pp.

RUSSIAN, per, Vysokomolekularnyy Soyedin,
Vol. I, No 11, 1955, pp 1647-1651.

Sci
Mar 62
Vol IV, No 2

ATS-84M40R
123/HZ-2092

188,897

Khazanovich, T. N.
THE EXCLUDED VOLUME IN THE THEORY OF
DEFORMATION OF SWELLED RETICULATED
(CROSS-LINKED) POLYMERS. [1951] [28]p. (4 figs.
omitted) 9 refs.

Order from LC or SLA m\$2.70, ph\$4.80 61-10912

Trans. of Vysokomolekulyarnye Soyedineniya (USSR)
1959 [v. 1] no. 11, p. 1659-1666.

The free energy of the network of a swelled polymer was calculated by assuming as chain model the "pearl necklace" earlier employed in studies on the volume effects in polymer solutions (Zhur. Tekh. Fiz. 28: 1437, 1958). The application of procedures from the theory of real gases is valid provided the correlation between the relative fluctuations of segment pairs decreases sufficiently rapidly with increasing distance between them. It is shown on a particular example that such a decrease does take place. The dimensionless free energy expansion factor is proportional to the mean number of segments (Chemistry--Organic, TT, v. 5, no. 11) (over)

61-10912

1. Polymers--Solubility
1. Khazanovich, T. N.

10⁻⁴ 11⁻¹ 12

Office of Technical Services

<p>Razuvayev, G. A., Minaker, K. S. and others. EFFECT OF AMINES ON STEREOSELECTIVE POLYMERIZATION OF PROPYLENE. [1960] Sp. Order from ATS \$9.65</p>	<p>ATS-61M45R 61-12312</p>
<p>Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1959, v. 1, no. 11, p. 1691-1695.</p>	<p>I. Propenes--Polymerization 2. Amines--Chemical effects I. Razuvayev, G. A. II. Minaker, K. S. III. ATS-61M45R IV. Associated Technical Services, Inc., East Orange, N. J.</p>
<p>147073</p>	
<p>ATS-RJ-2663</p>	
<p>(Chemistry--Organic, TT, v. 5, no. 5)</p>	<p>Office of Technical Services</p>

Plate, N. A., Prokopenko, V. V., and Kargin, V. A.
POLYMERIZATION OF CERTAIN MONOMERS
DURING DISPERSION OF INORGANIC SUBSTANCES.
[1962] 9p. (figs. omitted) 13 refs.
Order from OTIS or SLA \$1.10

62-18818

Trans. of Vysokomolekulovye Soedineniya (USSR)
1959, v. 1, no. 11, p. 1713-1720.

DESCRIPTORS: *Inorganic substances, *Polymerization,
Molecular structure, Chemical reactions, Exchange
reactions, Polymers, Production, Dispersion
hardening.

62-18818

I. Plate, N. A.
II. Prokopenko, V. V.
III. Kargin, V. A.

Office of Technical Services

Polycondensation Reactions in the Solid Phase. II. Polycondensation of Amino-heptanoic Acid in the Solid Phase in the Presence of Catalysts, by A. V. Volokhina, G. P. Kudryavtsev.
RUSSIAN, per, Vysokomolekul Soedin, Vol 1, No 11, 1959, pp 1724-1732.
Chem Trans Sv 3092

321,785

Sci - Chemistry
Apr 67

Copolymerization of Vinyl Acetate with
Crotonamide and Methylacrylonitrile, by
S. N. Ushakov, L. B. Trukhanova.
RUSSIAN, per, Vysokomolekul Soedin, Vol 1,
No 12, 1959, pp 1754-1757.
ATS RJ-4959

Sci-Mat
Feb 69

373,776

Synthesis and Study of Stereoregular Copolymers of Propylene and Isoprene, by N. S. Volkova, G. V. Khutareva, 7 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya, Vol I, No 12, 1959, pp 1758-1763.

Sci

ABE-88442R
ATS/RJ-2465
190,238

Apr 62

Vol IV, No 6

Studies in Coordination Chain Polymers
I. The Preparation of Polymers of bis-(β -Diketones) and Metals, by V. V. Korshak,
Ye. S. Krongauz, et al, 9 pp.

RUSSIAN, per, Vysokomolkulyurnyye
Soyedineniya, Vol 1, No 12, 1959,
pp 1764-1771.

AT&T-18M3DR
ATC/RJ-2441

Sci
Mar 62
Vol IV, No 2

188, 894

Synthesis and Study of Stereoregular Copolymers of Propylene and Isoprene, by N. S. Volkova, G. V. Khutareva, 7 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya, Vol I, No 12, 1959, pp 1758-1763.

AT&T-88M2R

Sci

Apr 62

Vol IV, No 6

Berlin, A. A. [Tcherkashin, M. I.] and others.
POLYMERS WITH CONJUGATED BONDS IN THE
MACROMOLECULAR CHAIN. V. SYNTHESIS AND
SOME PROPERTIES OF POLYARYL VINYLENES.
17 Mar 60, [9]p. 2 refs.
Order from LC or SLA mi\$1.80, ph\$1.80 60-18468

Trans. of Vysokomolekulovye Sovedineniya (USSR)
1959, v. 1 [no. 12] p. 1817-1820.

Phenylacetylene and p-diethynylbenzene are capable of polymerization and copolymerization on heating at 150 to 400°C or at 70°C in the presence of complexes of an aluminum trialkyl and TiCl₄ or TiCl₃. On increasing the polymerization temperature of phenylacetylene from 150 to 300°C, there is an increase in yield, molecular weight and viscosity of polyphenylvinylene; at the same time the polymer color changes from yellow to brown (300°C) and black (400°C). Polymers of phenylacetylene and p-diethynylbenzene and their copolymers have narrow EPR signals, a large concentration of paramagnetic particles (10¹⁷ to 10¹⁹ particles/g) and a high value of (Chemistry--Organic, TT, v. 5, no. 3) (over)

60-18468

1. Acetylenes--Polymerization
 2. Title: Vinylones
 3. Title: Conjugated bonds
- I. Berlin, A. A.
II. Tcherkashin, M. I.
III. Title: Synthesis...

142,989

Office of Technical Services

Guzeev, V. V., Marozov, V. I., Shtarkman, B. P.,
and Rylow, E. E.
AUTOMATIC APPARATUS FOR THE TURBIDOMETRIC
TITRATION OF POLYMER SOLUTIONS. [1963] 7p
(figs refs omitted)
Order from OTS, SLA, or ETC \$1.10 TT-64-10200

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1959, v. 1, no. 12 [p. 1840-1843].

TT-64-10200

I. Guzeev, V. V.
II. Marozov, V. I.
III. Shtarkman, B. P.
IV. Rylow, E. E.

(Chemistry--Analytical, TT, v. 11, no. 12)

Office of Technical Services

Studies on the Spherulite Structure of Polymers.
I. Degradation of Polymer Spherulites Under
the Action of Fast Electrons, by P. V. Kozlov,
Pan-tun Li, N. F. M Bakayev, 8 pp.

RUSSIAN, per, Vysokomolekulyarnyye
Soyed, Vol I, No 12, 1959, pp 1848-1859.

Sci
Vol IV, No 7
Apr 62

AT&T-89442R
TP-1848-1852-AT-1/RJ-2449
192, 643

13 069

In-1

KABANOV V. A., KARGIN V. A., SERGEEV G. V.,
ZUBOV V. P.

Electron resonance study of polymerization in the acrylonitrile:
magnesium system obtained by molecular beam condensation

Vysokomol. Soed., 1, No. 12, 1859-1861 (1959)

379/60 - English

E u r a t o m

The Synthesis of Thermoreactive Copolymers of
Vinyl Acetate and Vinyl Alcohol with
Methylolcrotonamide, by S. N. Ushakov,
E. M. Lavrant'eva.
RUSSIAN, per, Vysokomolekul Soedin, Vol 1,
No 12, 1959, pp 1862-1867.
ATS RJ-4958

Sci-Mat
Feb 69

373,775

BD 12/60 b .

(SF - 1432).

60th Birthday of S. M. Lipatov, 27

RUSSIAN, per, Vysokomolekularnyye Soyedineniya, No 12,
1959, pp 1868-1869.

*JPRS 1663

USSR

Bios

27 Apr 61

Eleventh All-Union Conference on High-Molecular-
Weight Compounds, by N. F. Bakeyev, 23 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol I, No 1, 1959, pp 1877-1891.

JPRS 3552

Sci - Phys

Oct 60

VYSOKOMOLEKULYARNYE SOEDINENIYA
(Polymer Science USSR - monthly)
Translation begins with 1960, Vol. 1
Lag time: ca. 9 months
Order from: Pergamon Press, Ltd.,
Headington Hill Hall
Oxford, OX3, OBW
Annual subscription: £ 60.00
2-year price : £ 108.00
Single issues : £ 5.50
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2-year price : \$ 270.00
Single issues : \$ 14.00

Russ

NBS S-463104-68-D (TD 2 weeks) R-89b7-D
28 Nov 67
The synthesis and basic properties of polyacrylate
esters of different degrees of polymerization
By: A.A. BERLIN
From: Vysokomolekularneye Soedineniya Vol 2, No 3,
1960: 411-416 (6 pp)

Russian - est for wds:

Please translate and type 1 original and 1 carbon copy.
Document can be cut.

Diffusion Coefficient and the Nature of
Diffusing Molecules, Pt. I, by R. M.
Vasenin.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 2, 1960, pp 857-63.

SLA TT-66-10794

331, 506

Sci - Chem
Jul 67

Korshak, V. V., Polyakova, A. M., and Suchkova, M. D.
SYNTHESES DES COMPOSÉS VINYLIQUES DU PLUMB ET RECHERCHE DE LEUR POLYMÉRISATION [The Synthesis of Vinyl Compounds of Lead and a Study of their Polymerization] tr. by Szyszman. [1961] [22]p. 10 refs. CEA Trans. R 1413 (text in French).
Order from OTS or SLA \$2.60

62-13807

Trans. in French of Vysokomol[ekulyarnye] Soed-[ineniya] (USSR) 1960 [v. 2] no. 1, p. 13-19.

DESCRIPTORS: Synthesis, *Vinyl radicals, Dioxides, Decomposition, *Polymerization, Copolymerization, Styrenes, Ethyl radicals *Lead compounds, Methyl radicals.

(Chemistry--Organic, TT, v. 7, no. 8) (over)

62-13807

- I. Korshak, V. V.
- II. Polyakova, A. M.
- III. Suchkova, M. D.
- IV. CEA-tr-R1413
- V. Commissariat à l'Energie Atomique (France)

Office of Technical Services

Radiation Polymerization of Isoprene, Pt. 2,
by V. S. Ivanov, M. A. Sokolova, 3 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol II, No 1, 1960, pp 35-37.

AT

AT&T-09M45R

203, 221

Sci

Jun 62

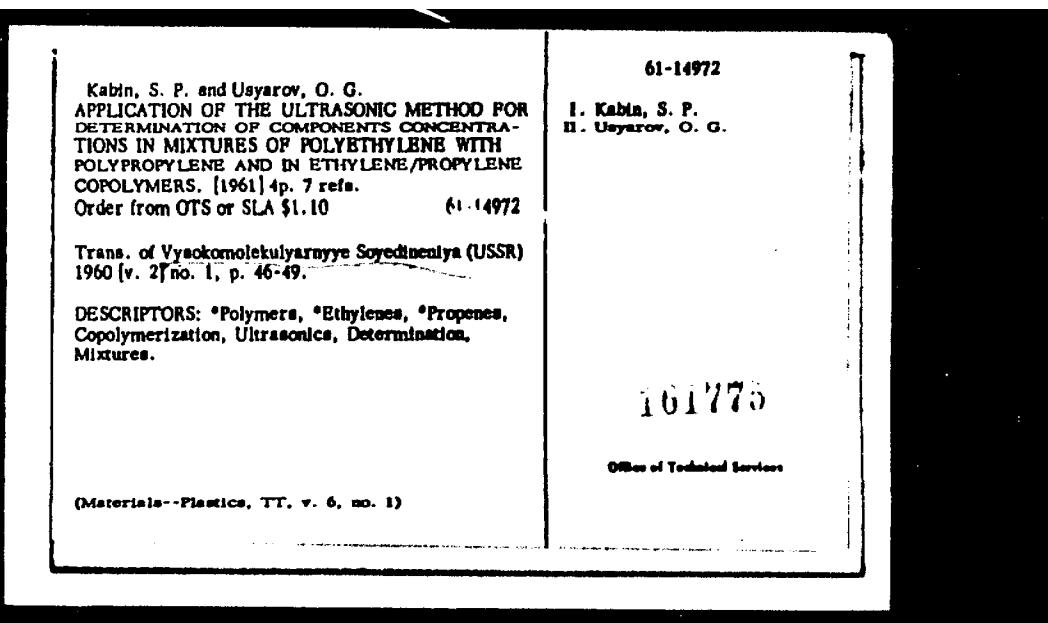
Deformation Properties of Polymers,
by Ye. Ye. Glukhov, A. A. Gor'kina,
A. V. Shelion, 9 pp.

RUSSIAN, per, Vysokomolekuljarnyye
Soyedineniya, Vol II, No 1, 1960,
pp 38-45.

OTS - 10176
ATG-53M40R
ATG/HF-2455

Sci
Mar 62
Vol IV, No 2

188, 898



Korshak, V. V., Vinogradova, S. V., and
Lebedeva, A. S.
HETEROCHAIN POLYESTERS. XXVI. SOME LAWS
GOVERNING POLYESTERIFICATION AT THE INTER-
FACE BOUNDARY. 27 Apr 60 [11]p. 13 refs.
Order from LC or SLA mi\$2.40, ph\$3.30 60-18472

Trans. of Vysokomolekulyarnyye Soyedineniya (USSR)
1960, v. 2 [no. 1] p. 61-66.

Some laws were investigated governing the polyesterification at the interface boundary. The yield of polyester and its reduced viscosity increase with an increase of the intensity of stirring of the reaction mixture. The highest molecular weight of polyester was obtained on adding a solution of isophthaloyl chloride in p-xylene to an aqueous-alkaline solution of diane (0.1M concentration) during 11 minutes at about 20°C, when working with solutions of the starting substances with the same concentration. (See also 60-12618)

(Chemistry--Organic, TT, v. 3, no. 3)

60-18472

1. Carboxylic acids--
Condensation
2. Phenols--Condensation
3. Esters--Polymerization
4. Title: Hetero-chain polymers
5. Title: Esterification
- I. Korshak, V. V.
- II. Vinogradova, S. V.
- III. Lebedeva, A. S.
- IV. Title: Some...

143,027

Office of Technical Services

Kolesnikov, H. S. and Matveyeva, N. G.
CARBOCHAIN POLYMERS AND COPOLYMERS. XX.
ON THE POLYMERIZATION AND COPOLYMERIZA-
TION OF 1-FLUORO-1,1-DICHLORO- AND 1,1-DI-
FLUORO-1-CHLORO-PROPYLENES-2. [1960] 6p.
13 refs.

Order from LC or SLA m\$1.80, ph\$1.80 60-18470

Trans. of Vysokomolekulyarnyye Soyedineniya (USSR)
1960, v. 2, no. 1, p. 82-84.

The synthesis, polymerization and copolymerization of
1-fluoro-1,1-dichloro- and 1,1-difluoro-1-chloropropylene-2 were accomplished by the dehydrochlorination
from 1-fluoro-1,1,3-trichloro-propane and 1,1-di-
fluoro-1,3-dichloro-propane, respectively. The co-
polymers of 1-fluoro-1,1-dichloro- and 1,1-difluoro-
1-chloropropylene with styrene have glass transition tem-
peratures higher than the glass transition tempera-
ture of homopolymers which is explained apparently by
the formation of fluorine-hydrogen bonds between the
polymer chains. (See also 60-10042, 60-22806)

60 18470

- I. Propenes--Polymerization
- I. Kolesnikov, H. S., G. S.
- II. Matveyeva, N. G.
- III. Title: Polymerization...

143,028

NLL 11.3300

Office of Technical Services
(Chemistry--Organic, TT,
v. 5, no. 3)

Investigation into the Mechanical Properties of
Polymers Undergoing Irradiation, Parts I and II,
by M. A. Mokul'skii.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol II, 1960, pp 103-118.
•AEC

Phys
May 64

CEA-tr-R-1400 Uncl.

PROCESSUS CINETIQUES DANS UNE SUBSTANCE
IRRADIEE. (Kinetic Processes in Irradiated
Substances). M. A. Mokul'skii. Translated
into French from Vysokomolekulyarnye
Soedineniya, 2: 119-29(1960). 34p.
(Includes original, 11p.).

Radiation Effects; Translations MC-40

C-40 NP NSA Dep.(mc); \$3.60(fs), \$1.22(mf)
JCL or OTS

N-5

<p>Bresler, S. Ye, and others. DEGRADATION OF STEREOREGULAR POLYPROPYLENE. [1960] 5p. 3 refs. Order from SLA m\$1.80 ph\$1.80 60-18426 Trans. of [Vysokomolekulyarnyye Soyedineniya] (USSR) 1960 [v. 2] no. 1, p. 130-132.</p> <p>Experiments showed that polypropylene which is quite thermo-stable in a vacuum, undergoes an intense oxidative degradation on heating in the air. In the presence of oxygen there is observed no difference in degradation of the amorphous and crystalline polypropylene. Residues of titanium oxide which can be present in commercial samples of polypropylene obtained by means of Ziegler catalysts have no effect on polymer degradation. In order to inhibit the oxidative degradation of polymers it is necessary to use antioxidants which act weakly at room temperature. Di-(4-oxyphenyl) sulfide especially strongly inhibits the oxidative degradation of polypropylene. (Author) (Chemistry--Organic, TT, v. 5, no. 3)</p>	<p>60-18426</p> <p>1. Propene polymers-- Deterioration 2. Propene polymers--Oxidation I. Bresler, S. Ye.</p> <p>143,042</p> <p>Office of Technical Services</p>	
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<p>Zil'berman, Ye. N. and Teplyakov, N. M. SYNTHESIS OF COMPLEX POLYESTERS FROM DINITRILES AND GLYCOLS VIA POLYIMINOCOESTER HYDROCHLORIDES. 20 Apr 60 [7]p. 4 refs. Order from LC or SLA mif1.80, phf1.80 60-18469 Trans. of Vysokomolekulyarnyye Soyedineniya (USSR) 1960, v. 2 [no. 1] p. 133-133.</p> <p>By interaction of dinitriles of alkanedioic and aralkane-dioic acids with glycols in the cold and in the presence of hydrogen chloride, there are formed polyiminocoester hydrochlorides that are transformed by hydrolysis into complex polyesters having terminal nitrile and hydroxy groups. Eight complex polyesters with molecular weights of 1000-1700 were synthesized. (Author)</p> <p>(Chemistry--Organic, TT, v. 5, no. 3)</p>	<p>60-18469</p> <p>1. Esters--Synthesis 2. Cyanides--Chemical reactions 3. Glycols--Chemical reactions I. Zil'berman, Ye. N. II. Teplyakov, N. M.</p> <p>143,029</p> <p>Office of Technical Services</p>
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Plasticization of Poly(Vinyl Alcohol)-
Styrene and Polyacrylic Acid-Styrene Graft
Copolymers, by V. A. Kargin.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 2, No 1, 1960, pp 166-173.
NTC-71-11535-11I

Feb 72

Uskov, I. A.
THE FILLING OF POLYMETHYL METHACRYLATE
WITH AMINATED BENTONITE BY DIRECT ADDITION
INTO THE MONOMER; THE EFFECT OF AMINATED
BENTONITE DISPERSION IN THE MONOMER ON THE
STRENGTHENING OF PMMA; POLYMERIZATION OF
MMA WITH DISPERSED SODIUM BENTONITE
(Napolnaenie Polimetilmekrilata Aminirovannym
Bentonitem, Vyodimyy Neopredstvenno v Monomer;
Vliyanie Dispergirovaniya Aminirovannogo Bentonita v
Srede Monomera na Uchilenie Polimetilmekrilata;
Polimerizatsiya MMA v Monomer s Dispergatsiyoy
Natrievogo Bentonita) tr. by R. J. Zatorski. Pts. 1-3 of
Filled Polymers. [1963] [25]p (foreign text included)
22refs [CSIRO] Trans. no. 6170
Order from OTS, SLA, or ETC \$2.60 TT-63-23754

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1960, v. 2, no. 2, p. 200-204, 728-730, 926-930.
(Abstract available)
(Materials-Plastics, PT, v. 11, no. 2) (over)

TT-63-23754

- I. Uskov, I. A.
- II. Title: Effect...
- III. Title: Filled...
- IV. Title: Polymerization...
- V. CSIRO Trans-6170
- VI. Commonwealth Scientific
and Industrial Research
Organization (Australia)

Office of Technical Service

<p>Uskov, I. A. FILLED POLYMERS. I. FILLING OF POLY(METHYL METHACRYLATE) BY ANIMATED BENTONITE, ADDED DIRECTLY TO THE MONOMER. [1961]6p. Order from ATS \$9.85 ATS-69P58R</p> <p>Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1960, v. 2, no. 2, p. 200-204. An abstract trans. is available from LC or SLA mi\$1.80, ph\$1.80 as 60-23835, AID-60-27, 15 July 60, 1p.</p> <p>DESCRIPTORS: *Methyl radicals, *Acrylic resins, *Bentonite, Polymerization, Polymers</p> <p>For abstract see Technical Translations <u>4</u>: 682, 1960.</p> <p>(Materials--Plastics, TT, v. 7, no. 10)</p>	<p>62-12571</p> <p>I. Uskov, I. A. II. Title; Filling ... III. ATS-69P58R IV. Associated Technical Services, Inc., East Orange, N. J.</p> <p>Office of Technical Services</p>
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<p>Kargin, V. A., Kabanov, V. A., and Zubov, V. P. SYNTHESIS OF ISOTACTIC POLY(METHYL METHACRYLATE) BY POLYMERIZATION OF THE FROZEN MONOMER. [1960] 3p. Order from ATS \$3.60 Trans. of Vysokomolekulyarnyye Soyedineniya (USSR) 1960, v. 2, no. 2, p. 303-305.</p> <p>148,670</p> <p>(Chemistry--Organic, TI, v. 5, no. 7)</p>	<p>61-12691</p> <p>I. Acrylic resins--Synthesis I. Kargin, V. A. II. Kabanov, V. A. III. Zubov, V. P. IV. ATS-35M47R V. Associated Technical Services, Inc., East Orange, N. J.</p> <p>ATS-RJ-2680</p> <p>Office of Technical Services</p>
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Mechanism of Oxidation of Cellulose and of Its
Approximate Models by Atmospheric Oxygen, by

O. P. Golova.

RUSSIAN, per, Vysokomolckulyarnye Soedineniya, Vol 2,
No 3, 1960, pp 337-340.

*NTIS TT 71-51002

July 71

<p>Korotkov, A. A. and Chesnokova, N. N. CATALYTIC COPOLYMERIZATION OF STYRENE WITH BUTADIENE. [1961] 14p. 12 refs. Order from OTS or SLA \$1.60 61-14970</p> <p>Trans. of Vysokomolekulyarnyye Soyedineniya (USSR) 1960, v. 2 [no. 3] p. 365-374.</p> <p>DESCRIPTORS: Catalysts, *Copolymerization, *Styrenes, *Butadienes, Polymers, Chemical reactions.</p> <p>(Chemistry--Organic, TT, v. 6, no. 1)</p>	<p>61-14970</p> <p>I. Korotkov, A. A. II. Chesnokova, N. N.</p> <p>161773</p> <p>Office of Technical Services</p>
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<p>Korshak, V. V., Gribova, I. A. and others. SYNTHESIS AND POLYMERIZATION OF ARYL PHOSPHONITRILES AND ALKYL PHOSPHONITRILES. [1961] 9p. 7 refs. Order from OTS or SLA \$1.10</p> <p>61-19740 62-16743</p> <p>Trans. of Vyssokomolekulyarnyye Soyedineniya (USSR) 1960, v. 2, no. 3, p. 377-385. Abstract trans. available from LC or SLA as 60-23844. AID-60-16, 19 July 60, 1p.</p> <p>DESCRIPTORS: *Phosphonitriles, Synthesis, Polymerization, *Polymers, Phosphorus compounds, Phenyl radicals, Alkyl radicals.</p> <p>For abstract see Technical Translations 4: 657, 1960.</p> <p>(Chemistry--Organic, TT, v. 6, no. 1)</p>	<p>61-19740</p> <p>I. Korshak, V. V. II. Gribova, I. A. III. Translations, New York</p> <p>161852</p> <p>Office of Technical Services</p>
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Investigation of the Possibility of Preparing
Unsaturated Compounds of Cellulose by the Chugaev
Reaction, by A. I. Polyakov.

RUSSIAN, per, Vysok Soedin, Vol II, No 3, 1960,
pp 386-389.

NLL(LOAN)Ref: 5828.4 1963 (5440)

Sci-Chem
April 64

The Synthesis and Basic Properties of
Plyacrylate Esters of Different Degrees
of Polymerization, by A. A. Berlin,
T. Ya. Kefeli, Yu. M. Filippovskaya,
Yu. M. Silvergin.
RUSSIAN, per, Vysokomolekulyarnye
Soedineniya, Vol 2, No 3, 1960, pp. 411-
16
NTC 69-10641-07C

Sci-Chem

<p>Kozlov, P. V. and others. STUDIES IN THE SPHERULITE STRUCTURE OF POLYMERS. III. A STUDY OF THE MICROSPHERULITE STRUCTURE OF POLYMERS BY ETCHING. [1960] 12p. 11 refs. Order from SLA m\$2.40, ph\$3.30</p> <p>Trans. of [Vysokomolekulyarnye Soyedineniya] (USSR) 1960 [v. 2] no. 3, p. 421-426.</p> <p>On the basis of the etching method used there were shown optical and electron microscopic studies of structures of microspherulites occurring in films of polyethylene sebacate obtained from solution. The separate coexistence in the microspherulite of polyethylene sebacate of crystalline and amorphous phases was established. The crystalline phase of the polymer is constituted of a helical-ribbon shaped packet of polymer chains composing the structural elements of the microspherulites themselves. The amorphous phase of the polymer consists of globular shapes not (Chemistry--Organic, TT, v. 5, no. 3) (over)</p>	<p>60-18427</p> <p>I. Polymers--Crystal structure 2. Title: Spherulite structure I. Kozlov, P. V. II. Title: Study...</p> <p>143,041</p> <p>Office of Technical Services</p>
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A Study in the Field of Organophosphorus Polymers.
IX. Polycondensation Reaction of Phosphonic Acid
Dichlorides With Dihydroxy Compounds, by V. V.
Korshak, et al.

RUSSIAN, par, Vysokomolekulyarnye Soyedineniya,
Vol II, 1960, pp 427-432.

AT&T 5041R
AT&T 5041R
138,282

Sci - Chem

<p>Kolesnikov, G. S., Suprun, A. P. and others, CARBON CHAIN POLYMERS AND COPOLYMERS. XXI. COPOLYMERS BASED ON BICYCLO(2.2.1) HEPTA-2,5-DIENE AND 1,2,3,4,7,7-HEXACHLORO- BICYCLO(2.2.1)HEPTA-2,5-DIENE. [1961] 5p. Order from ATS \$6.75 ATS-19N52R 61-2D642 Trans. of <u>Vysokomolekulyarnye Soedineniya (USSR)</u> 1960, v. 2, no. 3, p. 451-455.</p> <p>DESCRIPTORS: Polymerization, Copolymerization, Condensation reaction, Polymers, Cyclic compounds, Chlorine compounds</p> <p>(Chemistry--Organic, TT, v. 6, no. 4)</p>	<p>61-22936 .</p> <p>I. Kolesnikov, G. S. II. Suprun, A. P. III. Title: Copolymers ... IV. ATS-19N52R V. Associated Technical Services, Inc., East Orange, N. J.</p> <p>17764</p> <p>ATS-RJ-3073</p>
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Office of Technical Services

11 009

US-14

KISHCH L., DOBE Ya.

Graft copolymerization of methyl methacrylate and styrene
on gelatin induced by ionizing radiation

Vysokomolekulyarnye Soedineniya, 2, No. 3, 464-465 (1960)

ATS-91M41R. \$ 2.10 - English

E u r a t o m
AT&T/KS/... 4/2/97

Levoglucosan Polyethers. I. Polymerization of Leroglucosan
and its Ethers, by V. V. Korshak.

RUSSIAN, per, Vysokomolckulyarnye Soedineniya, Vol 3, No 3
1961, pp 477-485.

*NTIS TT 71-51003

July 71

Interfacial Polycondensation of Diamine Salts
and Dicarboxylic Acid Chlorides, by
L. B. Sokolov, T. V. Kudim, 4 pp.

RUSSIAN, per, Vsesokomolekulyarnyye
Soyed, Vol II, No 4, 1960, pp 481-484.

AT&T-2442R
ATE/RJ-2456

Sci
Vol IV, No 7
Apr 62

192, 654

<p>HEAT RESISTANCE OF CHELATE (METAL-COORDINATION) POLYMERS. 7 Nov 60, 3p. AID rept. No-83, AD-246 712. Order from LC or SLA m\$1.80, ph\$1.80 61-13991 Abstract trans. of Vysokomolekulyarnyye Soyedineniya (USSR) 1960, v. 2, no. 4, p. 492-507 and 526-528, no. 5, p. 662-722 and 701-792. Complete translations are available from ATS: Pt. 1, \$9.50 as ATS-45M42R [1960] 7p. Pt. 2, \$12.50 as ATS-44M42R [1960] 10p. Pt. 3, \$13.95 as ATS-13M43R [1960] 10p. Pt. 4, \$6.00 as ATS-32M42R [1960] 4p. Pt. 5, \$3.00 as ATS-14M43R [1960] 2p. PP 432-419 7 - ATS/RT-2423 Content: 29 52 55 57 58 59 60 61 62 63 AT/RT 2440 I. Study in the Field of Coordination of Polymers. II. On Some Metal-Containing Polymers of Quinizarin, by V. V. Korshak and others (Chemistry--Organic, TT, v. 5, no. 4) (over)</p>	<p>61-13991 1. Chelate compounds-- Thermal properties 2. Title: Coordination polymers 3. AID-fD-83 II. Air Information Div., Washington, D. C. III. Title: Investigation of Coordination-chain Polymers, Pts. 2-4. IV. AD-246 712 143,339 PP 448-507-ATS/R5-2424 Office of Technical Services</p>
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<p>2. Study in the Field of Coordination Polymers III. On the Coordination of Polymers Based on Bis-(8-hydroxyquinolyl)-methane, by V. V. Korshak and others</p> <p>3. Study in the Field of Coordination Polymers IV. Synthesis of Polymers Based on Aromatic Bis-β-diketones) with Metals, by V. V. Korshak and others</p> <p>4. Synthesis of Polymers Based on δ-chlorovinyl Ketone by A. N. Neameyanov and others</p> <p>5. Synthesis of Chelate Polymers, by N. A. Glukhov and others</p>	PB- 61-13991	
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Investigation of Coordination Polymers III.
Coordination Polymers of BIS (8-HY-Droxyguinolyl)
Methane, by V. V. Korshak, S. V. Vinogradova,
T. M. Babchinitser.

RUSSIAN, per, Vysokomolekularnye Soyed,
Vol II, No 4, 1960, pp 498-507.

AT&T-44M42R
AT&T-RS-2424

192, 641

Sci
Vol IV, No 7
Ayr 62

Slovokhotova, N. A., Sadovskaya, G. K., and
Kargin, V. A.
INFLUENCE OF FAST ELECTRONS ON THE
STRUCTURE OF POLYETHYLENETEREPHTHALATE.
(1961) (2 figs. omitted) 12 refs.
Order from OTS or SLA \$1.10

62-10980

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 4, p. 515-520.

DESCRIPTORS: *Electrons, Crystal structure,
*Polymerization, *Ethylenes, *Phthalates, Isomeric
transitions, Ionization, *Radiation effects, Phenyl
radicals, Radiochemistry.

Polyethyleneterephthalate on irradiation with fast
electrons goes over from the crystalline to the amorphous
state. This amorphisation is associated with
the isomerization of certain portions of the polymer
(Nuclear Physics and Nuclear Chemistry, TT, v. 8,
no. 6) (over)

62-10980

I. Slovokhotova, N. A.
II. Sadovskaya, G. K.
III. Kargin, V. A.

Office of Technical Services

Polymer Based on 3,3'-Bis(hydroxyethyl)
Propane and Phthalic Acids, by A. A.
Makogonov, N.Y.U. Barbusina, S. L.

RUSIAN, gaz, Vysokomolekularnaya Khimiya
vol. 17, no. 4, 1965, pp. 210-220, Eng.

SLA 60-18268

600
Feb 62

186, 214

Andrianov, K. A., Grishanova, O. I., and others.
STUDY OF THE POLYCONDENSATION REACTION
OF POLY(ETHYL ENETEREPHthalATE AND
POLYORGANOETHOKYSILOXANES. 7 Nov 60. 2p.
AID rept. 00-82; AD-246 711.

Order from LC or SLA m\$1.80, ph\$1.80 61-13990

Abstract trans. of Vysokomolekulyarnyye Soyedineniya (USSR) 1960, v. 2, no. 4, p. 321-325.

An organosilicon polymer with active ethoxy groups was synthesized by heterocondensation of methyl phenyl ethoxymidane chloride with phenyl triethoxysilane in a molar ratio of 1:0.5. The molecular weight of the polymer was 600-800, and the content of the ethoxy groups was 22.50%. The structure was assumed to be linear, with ethoxy groups situated both in the ends of the chain and as occasional side substituents. These active groups were then brought in contact with active hydroxyl end groups of polyethyl-

(Materials--Palata, TT, v. 5, no. 4) (over)

61-13990

1. Silicones--Polymerization
2. Phthalates--Polymerization
3. Condensation reactions
4. Varnishes--Development
5. Titik: Block polymers
6. Titik: Graft polymers
- I. Andrianov, K. A.
- II. Grishanova, O. I.
- III. AID-60-82
- IV. Air Information Div.,
Washington, D. C.
- V. AD-246 711

143,340

Office of Technical Services

Synthesis of Polymers From β -Chlorovinyl
Ketones, by A. N. Nesmeyanov, M. I. Rybinskaya,
G. L. Slonimskiy, 4 pp.

RUSSIAN, per, Vysokomolekularnyye
Soyedineniya, Vol II, No 4, 1960,
pp 526-528.

AT&T-32M42R

Sci
Vol IV, No 7
Apr 62

192,65-2

<p>Bykhovskii, V. K. and Minsker, K. S. THE ROLE OF ELECTRONIC SURFACE IMPERFECTIONS IN HETEROGENEOUS CATALYTIC POLYMERIZATION. I. THE POLYMERIZATION OF THE ALFINE TYPE, tr. by L. Gawronska. Dec 60, 9p. 20 refs. Courtaulds Misc. Lit. 3238; [DSIR LLU] M. 2950. Order from OTS or SLA \$1.10</p> <p>Trans. of <u>Ysyokomol [ekulyarnye] Soedineniya</u> (USSR) 1960, v. 2, no. 4, p. 329-334.</p> <p>DESCRIPTORS: *Polymerization, *Catalysts, Alkyl-radicals, Chlorides, Alcohols, Alkali metals, Ethylenes, Crystals, Electrons, Surfaces, Deformation.</p> <p>The mechanism of heterogeneous catalytic polymerization is examined from a novel viewpoint. The active centers of the catalyst surface are likened to electron (Chemistry--Organic, TT, v. 6, no. 10) (over)</p>	<p>61-23380</p> <p>I. Bykhovskii, V. K. II. Minsker, K. S. III. Title: Polymerization ... IV. Courtaulds ML-3238 V. DSIR LLU M. 2950 VI. Courtaulds Ltd. (Gr. Brit.)</p> <p style="text-align: center;">7029</p> <p>Office of Technical Services</p>
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Minsker, K. S. and Bykhovskii, V. K.
THE ROLE OF ELECTRONIC SURFACE IMPERFECTI-
ONS IN HETEROGENEOUS CATALYTIC
POLYMERIZATION. II. SYSTEMS OF THE TYPE OF
ZIEGLER-NATTA CATALYSTS, tr. by I. Gawronska,
2 Mar 61, 7p. 31 refs. Courtaulds Misc. Lit. 3280;
[DSIR LLU] M. 3181.
Order from OTS or SLA \$1.10

61-28143

Trans. of Vysokomol[ekuljarnye] Soedinenia (USSR)
1960, v. 2, no. 4, p. 535-540.

DESCRIPTORS: Catalysis, Polymerization, Crystals,
Impurities, Color centers, Lattices, Crystal structure,
Alkali metal compounds, Halides, Electrons.

The mechanism of heterogeneous catalytic polymeriza-
tion on catalysts of the Ziegler-Natta type was ex-
amined from a novel viewpoint. The catalytic activity of
(Chemistry--Physical, TT, v. 6, no. 11) (over)

61-28143

- I. Title: Ziegler-Natta
catalysts.
II. Minsker, K. S.
III. Bykhovskii, V. K.
IV. Title: Systems ...
V. Courtaulds ML-3280
VI. DSIR LLU M. 3181
VI. Courtaulds Ltd. (Gt. Brit.)

100-107

Office of Technical Services

Wang, Fo-shung, Dolgoplosk, B. A., and
Erusalimskii, B. L.
POLYMERIZATION OF ISOPRENE BY ORGANO-MAG-
NESIUM COMPOUNDS, Tr. by I. Gavronska.
24 Jan 61, 6p. 6 refs. Courtaulds Misc. Lit. 3267;
[DSIR LLU] M. 3083.
Order from OTS or SLA \$1.10

61-27557

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1960, v. 2, no. 4, p. 541-545.

DESCRIPTORS: *Isoprene, Polymerization, *Magne-
sium compounds, Microstructure, Chemical bonds,
Molecular association, *Metal-organic compounds.

It has been found that organo-magnesium compounds,
free of ether, produce the polymerization of isoprene
at higher temperatures. Polyisoprene formed under
these conditions is constituted mainly of 3,4 links. The
(Chemistry--Organic, TT, v. 6, no. 10) (over)

61-27557

- I. Wang, Fo-shung
- II. Dolgoplosk, B. A.
- III. Erusalimskii, B. L.
- IV. Courtaulds ML-3267
- V. DSIR LLU M. 3083
- VI. Courtaulds Ltd. (Gr. Brit.)

Office of Technical Services

Santo, I. and Gal, K.
GRAFTING OF VARIOUS MONOMERS TO POLY(VINYL ALCOHOL) FILMS UNDER THE ACTION OF X-RAYS. [1961] 3p.
Order from ATS \$4.00

ATS-92N54R

Trans. of Vysokomolokhelyarnye Soedineniya (USSR)
1960, v. 2, no. 4, p. 546-548.

DESCRIPTORS: *Monomolecular films, Vinyl alcohol, Alcohols, Films, Preparation, X-rays.

62-12090

I. Santo, I.
II. Gal, K.
III. ATS-92N54R
IV. Associated Technical Services, Inc., East Orange, N. J.

(Physics--Molecular, TT, v. 7, no. 4)

Office of Technical Services

Carbon-Chain Polymers and Copolymers,
Part 23. Copolymerization of Diallyl Deriva-
tives of Germanium, Tin, and Silicon With
Styrene and Methyl Methacrylate in the
Presence of Benzoyl Peroxide, by G. S.
Kolesnikov, S. L. Davydova.

RUSSIAN, per, Vysokomolekulyarnyye
Soyed, Vol II, No 4, 1960, pp 567-571.

Sci
Vol IV. No 7

AT&T-31M42R
AT&T-2423
192,640

Kozlov, P. V. and Berestneva, G. L.
EFFECT OF STRETCHING ON THE STRUCTURE
AND PROPERTIES OF POLYETHYLENE TEREPHTHALATE
FILMS. I. UNIAXIAL STRETCHING OF FILMS.
[26 Apr 63] [25 p. 13 refs.
Order from OTS or SLA \$2.60

63-18380

Trans. of Vysokomol[ekulyarnye] Soed[ineniya] (USSR)
1960, v. 2, no. 4, p. 591-600.

DESCRIPTORS: *Plastic films, *Polyester plastics,
*Phthalates, Ethylenes, Deformation, Mechanical
properties, Tensile properties, Photographic film.

The mechanical properties and structural changes of
polyethyleneterephthalate films subjected to uniaxial
stretching over a broad range of temperature at varying
rates and up to various limits were investigated.
Orientation, relaxation and crystallization processes
taking place in the films being stretched under the
(Materials--Plastics, TT, v. 10, no. 11) (over)

63-18380

- I. Title: Polyethylene terephthalate
- II. Kozlov, P. V.
- III. Berestneva, G. L.

Office of Technical Services

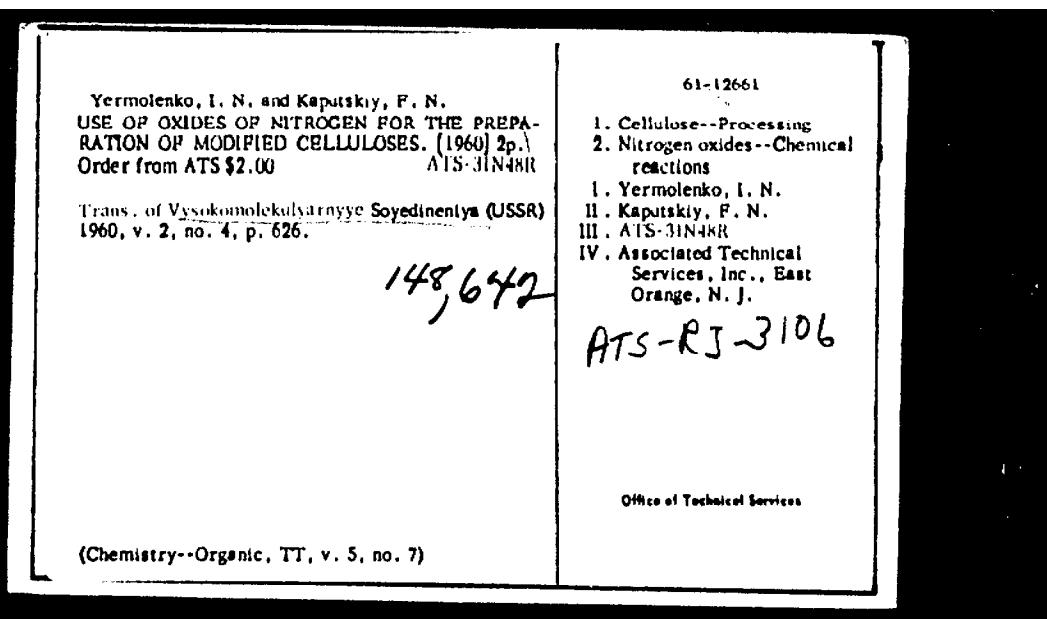
Investigation of Dielectric Losses and
Polarization of Stereoregular ~~EX~~ Polymethyl
Methacrylate, by G. P. Mikhaylov, T.
I. Borisova, 8 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol II, No 4, 1960, pp 619-625.

AT&T-1543R
AT&T-KJ-2425

Sci
Vol IV, No 9
Mar 62

187,133



Heterochain Polyamides. XXIII. Interfacial
Polycondensation of BIS (p-carboxyphenyl)
Phenylphosphine Oxide Dichloride With Hexa-
methylene diamine, by V. V. Korshak, et al.

RUSSIAN, per, Vysokomolekulyarnye Soyedineniya,
Vol II, 1960, pp 633-635.

ATS 2543R

Sci - Chem

HTS/R5-2432

Feb 61

138,279

Studies in the Field of Coordination Polymers,
IV. Preparation of Polymers Based on
Aromatic Bis (β-Diketones) With Metals,
by V. V. Korshak, Ye. S. Krongauz, V. Ye.
Sheyna, 10 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyed.
Vol II, No 5, 1960, pp 662-672.

Sci
Vol IV, No 7
Apr 62

ATS-13M43R
ATS/RJ 2463

192,642

Heterochain Polyamides. XXIV. Preparation of
Mixed Polyamides at the Phase Interface, by V. V.
Korshak, et al.

RUSSIAN, per, Vyssokomolekulyarnye Soyedineniya,
Vol II, 1960, pp 673-676.

Sci - Chem

Feb 61

AMS 87043B
ATC/RJ-2731

138, 277

Phosphorus-Containing Polymers. Part 2. An Application of the Arbuzov Reaction to the Synthesis of the Polyphosphonates, by K. A. Petrov, et al.

RUSSIAN, per, Vysokomolekulyarnye Soyedineniya, #2 Vol II, 1960, pp 685-688.

AT&T 3243R
AT&T/RJ-2430

Sci - Chem

Feb 61

138, 281

Berlin, A. A., Liogon'kij, B. I., and Partini, V. P.
DERIVATION AND PROPERTIES OF SOME AROMATIC POLYMERS. 31 Oct 60, 2p. AID rept. 60-76.
Order from LC or SLA m\$1.80, ph\$1.80 61-15025

Abstract trans. of Vyssokomolekulyarnyye Soyedineniya
(USSR) 1960, v. 2, no. 5, p. 699-707.
A complete translation is available from ATS, \$15.50,
as ATS-COM43R, 60-22941 [1960] 9p.

A linear polyphenylene polymer was synthesized by the decomposition of bis-diazotized aromatic amines (benzidine or benzidine-3, 3'-dicarboxylic acid) in contact with Cu²⁺ ions. Analysis of the polymers obtained indicated the presence of -N=N- groups and chlorine in the structure.

(Chemistry--Organic, TI, v. 5, no. 4)

61-15025

1. Cyclic compounds--
Polymerization
2. Polymers--Synthesis
- I. Berlin, A. A.
- II. Liogon'kij, B. I.
- III. Partini, V. P.
- IV. AID-60-76
- V. Air Information Div.,
Washington, D. C.
- VI. AD-24 U. 703

143,316
ATS/RJ-2464

Office of Technical Services

Preparation of High Molecular Aromatic Polyamides
by Interfacial Polycondensation in Acid Media,
by L. B. Sokolov, et al.

RUSSIAN, per, Vysokomolekulyarne Soyedineniya, Vol II, 1960,
1960, pp 698-703.

Sci - Chem
Feb 61

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per memo 16 Jan 61
ATC 17M43.9
ATC/RJC 2427

Some Rules in Interfacial Copolycondensation,
by L. B. Sokolov, T. L. Kruglova, 7 pp.

RUSSIAN, per, Vysokomolekulyarnyye
Soyed, Vol II, No 5, 1960, pp 704-709.

AT&T-24M43R

AT&T/RJ-24135

Sci
Vol IV, No 7
Apr 62

192, 655

Effect of the Solvent Capacity of the Organic Phase in the Interfacial Preparation of Polyamides, by L. B. Sokolov, et al.

RUSSIAN, per, Vysokomolekulyarnye Soyedineniya, Vol II, 1960, pp 710-715.

Sci - Chem

ATS 1843R

AT&T-2432

138,272

Polymerization of Dialdehydes, by Yu. V.
Mitin, Yu. N. Sazanov, 3 pp.

RUSSIAN, per, Vysokomolekulyarnyye
Soyedineniya, Vol II, No 5, 1960,
pp 716-718.

ATS-PJ-2684
ATS-40M4R

Sci
Vol IV, No 11
Jun 62

199, 239

Usakov, I. A. and Kusnitsyna, T. A.
THE EFFECT OF DISPERSING AMINATED BEN-
TONITE IN THE MONOMER ON REINFORCEMENT
OF POLY(METHYL METHACRYLATE). Pt. 2 of
Filled Polymers. [1961] 3p.
Order from ATS \$7.00

ATS-68P58R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1960, v. 2, no. 5, p. 728-730.
An abstract trans. is available from LC or SLA m\$1.80
ph\$1.80 in 61-13988, AID-60-80, 7 Nov 60, 2p.

DESCRIPTORS: *Plastics, *Bentonite, *Acrylic resins,
Methyl radicals, Polymers, Binders.

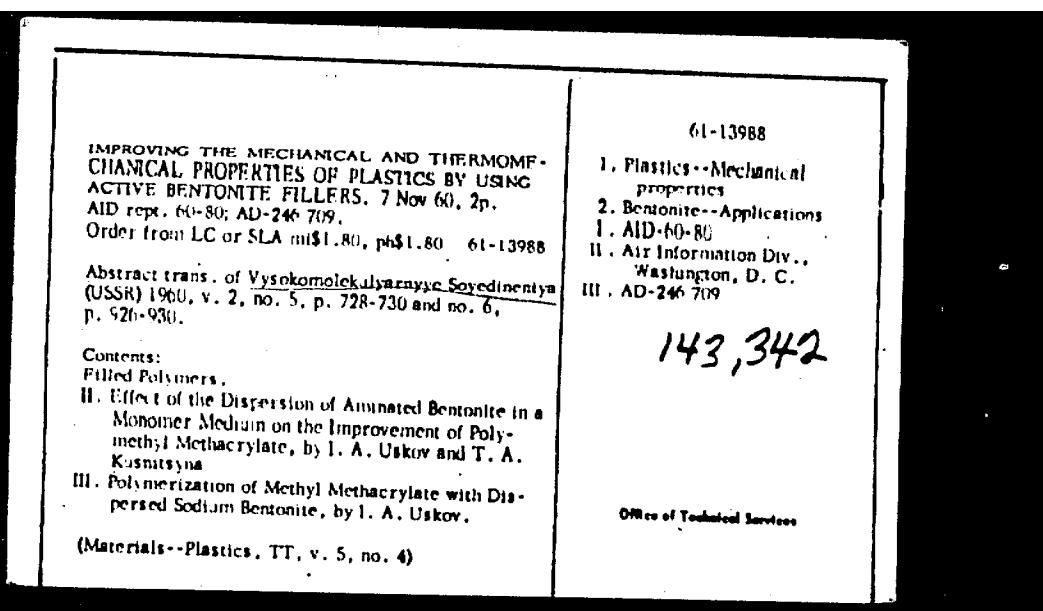
(Materials--Plastics, TT, v. 7, no. 9)

62-12669

I. Usakov, I. A.
II. Kusnitsyna, T. A.
III. Title: Filled...
IV. ATS-68P58R
V. Associated Technical Services
Inc., East Orange, N. J.

ATS-RI-3612

Office of Technical Services



Kargin, V. A., Kabanov, V. A., and Zubov, V. P.
THE FORMATION OF ISOTACTIC POLYMETHYL-
METHACRYLATE DURING PHOTOPOLYMERIZATION
IN THE SYSTEM: METHYL METHACRYLATE-ZINC
CHLORIDE. [1961] [7]p. 8 refs.
Order from OTS or SLA \$1.10

62-13837

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1960, v. 2 [no. 5] p. 756-769.

DESCRIPTORS: *Methyl radicals, *Polymers, *Zinc
compounds, *Chlorides, Phase transitions, Micro-
structure, Molecular structure, Polymerization.

It has been shown that an isotactic polymer is pro-
duced in the radical-induced polymerization of methyl
methacrylate at room temperature in the presence of
zinc chloride dissolved in the monomer. The effect of
the conformation of the reactant molecules in the
(Chemistry--Organic, TT, v. 7, no. 10) (over)

62-13837

I. Kargin, V. A.
II. Kabanov, V. A.
III. Zubov, V. P.
IV. Translations, New York

Office of Technical Services

<p>Kozlov, P. V., Makaruk, L. and others THE EFFECT OF MOLECULAR WEIGHT ON THE TRANSITION TEMPERATURES OF THE POLYCAR- BONATES. Pt. I. of Investigations in the Field of Poly- carbonates. [1960] 9p. Order from ATS \$11.95 ATS-43M46R Trans. of <u>Vysokomolekulyarnyye Soyedineniya</u> (USSR) 1960, v. 2, no. 3, p. 770-777.</p> <p>147,024</p> <p>{Physics--Molecular, TT, v. 5, no. 5)</p>	<p>61-12371</p> <p>I. Polymers--Transition temperature II. Carbonates--Transition temperature III. Carbonates--Molecular weight IV. Molecular weight-- Chemical effects I. Kozlov, P. V. II. Makaruk, L. III. Title: Investigations... IV. ATS-43M46R V. Associated Technical Services, Inc., East Orange, N. J. ATS-RJ-2686</p> <p>Office of Technical Services</p>
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Andrianov, K. A., Bochkareva, G. P. and others.
POLYANHYDRIDES FROM PHthalic ACIDS AND
MIXED PHthalicADIPIC ACIDS. [1962] 5p.
Order from ATS \$6.25

ATS-41P60R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1960, v. 2, no. 5, p. 793-796.

DESCRIPTORS: *Anhydrides, Hydrates, Polymers,
Synthesis, *Phthalic acids, acids, *Adipic acids,
Chemical reactions.

(Chemistry--Organic, TT, v. 8, no. 2)

62-17301

I. Andrianov, K. A.
II. Bochkareva, G. P.
III. ATS-41P60R
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS - RJ - 3616

Office of Technical Services

<p>Volkova, A. I., Koton, M. M., and Savitskaya, M. N. THE INFLUENCE OF THE CHEMICAL STRUCTURE OF SOME UNSATURATED ESTERS ON THEIR POLY- MERIZING ABILITY. [1960] 5p. (3 figs. omitted) 3 refs. Order from LC or SLA m\$1.80, ph\$1.80 61-10571 Trans. of Vysokomolekulyarnyye Soyedineniya (USSR) 1960, v. 27 no. 5] p. 802-805. Experiments showed that esters of acrylic acid are polymerized at a higher rate than isomeric to them vinyl esters. The introduction into the alkyl group of an unsaturated ester of chlorine atom, and the length- ening of alkyl radical slows down the polymerization process. (Chemistry--Organic, TT, v. 5, no. 7)</p>	<p>61-10571</p> <p>1. Acrylic ac. esters-- Polymeriz.ion 2. Vinyl compounds-- Polymeriz. 3. Molecular structure-- Chemical effects</p> <p>I. Volkova, A. I. II. Koton, M. M. III. Savitskaya, M. N.</p> <p>148, 547</p>	
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18

(NY ~~4486~~ 4486).

First All-Union Conference on Nucleic Acids and
Nucleoproteins, by V. S. Tongur, P. I. Tseymlin,

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol II, No 5, 1960, pp 817-822.

*JPRS

Sci/Biol/Chem

26 Jun 60

<p>Korshak, V. V., Frunze, T. M., and Kozlov, L. V. HETEROCHAIN POLYAMIDES. XXV. INTERFACIAL PREPARATION OF POLYAMIDES CONTAINING PIPERAZINE RESIDUES. [1960] 8p. Order from ATS \$12.45 ATS-93N47R Trans. of Vyssokomolekulyarnyye Soyedineniya (USSR) 1960, v. 2, no. 6, p. 838-844.</p> <p style="text-align: center;"><i>148, 672</i></p> <p>(Chemistry--Organic. TT. v. 5, no. 7)</p>	<p>61-12693</p> <p>I. Amides--Polymerization I. Korshak, V. V. II. Frunze, T. M. III. Kozlov, L. V. IV. Title: Interfacial... V. ATS-93N47R VI. Associated Technical Services, Inc., East Orange, N. J.</p> <p style="text-align: center;"><i>ATS-RJ-2675</i></p>	
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<p>Korshak, V. V., Frunze, T. M., and Kozlov, L. V. HETEROCHAIN POLYAMIDES. XXVI MIXED POLY- AMIDES FROM PIPERAZINE AND ALIPHATIC AND AROMATIC DICARBOXYLIC ACID. [1960] 6p. Order from ATS \$8.55 Trans. of Vysokomolekulyarnyye Soyedineniya (USSR) 1960, v. 2, no. 6, p. 845-850.</p> <p>148,668</p> <p>(Chemistry--Organic, TT, v. 5, no. 7)</p>	<p>61-12689</p> <p>1. Amides--Polymerization 2. Carboxylic acids-- Polymerization I. Korshak, V. V. II. Frunze, T. M. III. Kozlov, L. V. IV. Title: Mixed... V. ATS-94N47R VI. Associated Technical Services, Inc., East Orange, N. J.</p> <p>ATS-RI-2576</p> <p>Office of Technical Services</p>
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Synthesis and Investigation of Unsaturated Polyamides, by O. Ya. Fedotova, S. P. Kryaina, 4 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soedineniya, Vol II, No 6, 1960,
pp 875-878.

ATS-4044R ATS-RJ-2669

Sci
Vol IV, No 11
Jun 62

199, 237

Synthesis and Investigation of High-Molecular-Weight Tertiary Amines and Quaternary Ammonium Compounds From Copolymers of 2-Methyl-5-Vinylpyridine and Various Cross-Linking Agents,
9 pp. 9671176

RUSSIAN, per, Vysokomolekulovannye Soyedineniya,
Vol II, No 6, 1960, pp 884-890.

FTD MCL-974/1

Sci - Chem

171, 3-49

20 Oct 61

Synthesis and Investigation of Aromatic Polyamides, by O. Ya. Fedotova, I. P. Losev, et al.

RUSSIAN, per, Vysokomolekulyarnyye Soyed,
Vol II, No 6, 1960, pp 899-903.

Sci
Vol IV, No 11
Jun 62

EEKAAT-41064R
ATS - RJ - 2670
199, 236

Uskov, L. A.

FILLED POLYMERS. III. POLYMERIZATION OF
METHYLMETHACRYLATE WITH THE DISPERSION
OF SODIUM BENTONITE. [1963] [10p. 9 refs.
Order from OTS or SLA \$1.10 63-16596

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1960, v. 2, no. 6, p. 926-930.
An abstract trans. is available from LC or SLA
m\$1.80, ph\$1.80 in 61-13988, AID-60-80, 7 Nov 60, 2p.

DESCRIPTORS: *Methyl radicals, *Acrylic resins,
*Sodium compounds, *Bentonite, Graft polymers,
Polymerization, Fillers.

At the vibration disintegration of air-dry sodium
bentonite blocks in a methylmethacrylate medium,
this monomer is polymerized and polymethylmetha-
crylate is grafted onto the dispersed bentonite particles.
(Materials--Plastics, TT, v. 10, no. 6) (over)

63-16596

I. Title: Methyl methacrylate
I. Uskov, L. A.
II. Title: Polymerization ...

Office of Technical Services

Electron-Microscope Investigation of the
Structure of Polycarbonates, by L. Makaruk,
P. V. Kozlov, 6 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyed,
Vol II, No 6, 1960, pp 931-936.

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ATS-42M44R
ATS-RI-2687
197,944

(DC-5505).

A. V. Dumanskiy: 80th Birthday, *copy*

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol II, No 6, 1960, pp 960-961.

*JPRS 2443

Sci - Biographical

7 Mar 61

A Study of Some Relationships in Interfacial Polyesterification, by V. V. Korshak, S. V. Vinograd, A. S. Lebedeva, 7 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol III, No 7, 1960, pp 977-983.

AT&T-0545R
AT&T-R5-2677

Sci

203, 216

Jun 62

POLYMER SCIENCE USSR, 1962, VOL. 3, NO. 2,
P. 211-366. Aug 62, 1v.
Order from PP \$100.00/year

Trans. of Vysokomolekulyarnye Sredstva i Polimeriya (USSR) 1960,
v. 2, no. 7, p. 989-993, 1026-1030, 1039-1048, 1082-1092,
1103-1108, 1122; no. 8, p. 1157-1161, 1167-1170,
1176-1187, 1193-1195, 1213-1220, 1280-1282, 1287;
no. 9, p. 1297-1300, 1309-1319, 1360-1369, 1375-1382,
1391-1397, 1426-1431. Abstracts are included of
selected articles from v. 3, no. 12 and v. 4, no. 1.

DESCRIPTORS: *Polymers, Chemistry, *Amides,
Condensation reactions, *Ethylenes, Reaction kinetics,
Electrical conductance, *Acrylic resins, *Benzenes,
*Isoprenes, Polymerization, Copolymerization, *Radia-
tion chemistry, *Phenyl radicals, *Acetylenes, *Acryloni-
triles, *Propenes, *Phenol-formaldehyde resins, Anisot-
(Chemistry--Organic, TT, v. 10, no. 4) (over)

63-17527-2

I. Pergamon Press, Inc.,
New York

Office of Technical Services

Tszen, Khan-min and Kolesnikov, G. S.
CARBON-CHAIN POLYMERS AND COPOLYMERS,
XXV. THE ACTION OF CHLORIDES OF UNSATU-
RATED ACIDS ON POLYVINYL ALCOHOL. [1960]
6p. (refs. 4 figs. omitted).
Order from I.C or SLA mi\$1.80, ph\$1.80 61-10703

Trans. of *Vysokomolekulyarnye Soyuzmeniya* (USSR)
1960, v. 2 [no. 7] p. 1010-1012.

Properties of polyvinyl alcohol can be changed by its
treatment with chlorides of unsaturated acids. (See
also 61-12764)

(Chemistry--Organic, TT, v. 5, no. 11)

61-10703

1. Polymers--Synthesis
 2. Copolymerization--
Analysis
 3. Vinyl alcohol--Polymer-
ization
 4. Chlorides--Chemical
reactions
- I. Tszen, Khan-min
II. Kolesnikov, G. S.
III. Title: Action...

105013

Office of Technical Services

Some Properties of Aromatic and Arylaliphatic polyamides Prepared by Interfacial Polycondensation. Part I., by O. Ya. Fedotova, M. L. Kerber, I. P. Losev, 6 pp.

RUSSIAN, par, Vysokomolekularnyye Soyedineniya, Vol II, No 7, 1960, pp 1020-1025.

ATS-07M45R
ATS-XFJ-2672
203,219

Sci

Jun 62

Investigation of the Fine Molecular Structure
of Oriented Regenerated Cellulose Fibre Fibres
by N. V. Mikhailov.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol II, No 7, 1960, pp 1031-1038.

ILL RTS 2114

Sci - Mac Phys
Mar 63

223,617

Kinetic Study of Interfacial Polycondensation by
Electrical Conductivity Measurements, by Ye. Z.
Faynberg, N. V. Mikhaylov, 5 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol. II, No 7, 1960, pp 1039-1044.

ATS-08445R
ATS-PJ-2673

203, 218

Sci

Jun 62

Tavetkov, V. N., Skazka, V. S., and Krivoruchko, N. [Ya].
RELATION BETWEEN THE MOLECULAR WEIGHT AND INTRINSIC VISCOSITY OF STEREOREGULAR POLYMETHYL METHACRYLATE FRACTIONS IN BENZENE. [1961] [6]p. 8 refs.
Order from OTS or SLA \$1.10 62-13836

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1960, v. 2 [no. 7] p. 1045-1048.

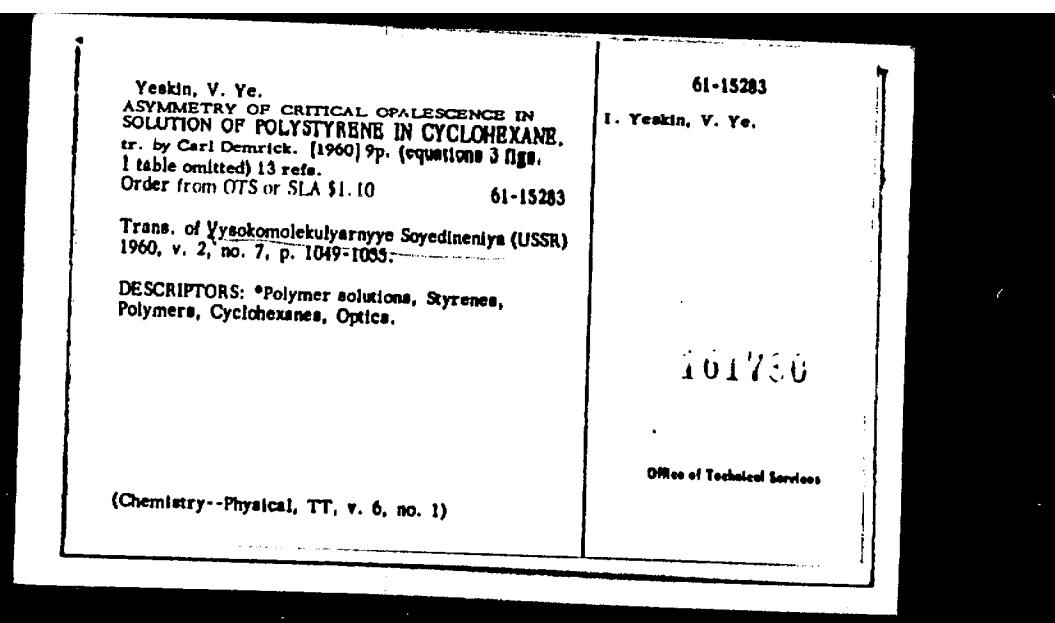
DESCRIPTORS: *Benzene, *Polymers, Methyl radicals, Methanes, Acrylic resins, Molecular weight, Viscosity, Stereochemistry.

A study was made of the scattering of light by various fractions of isotactic and syndiotactic PMMA in acetone and ethyl acetate, and the intrinsic viscosities of these fractions in benzene have been determined. It has been shown that the variation of the intrinsic viscosity of the (Chemistry--Organic, TT, v. 8, no. 2) (over)

62-13836

- I. Title: Stereoregular polymers
- II. Tavetkov, V. N.
- III. Skazka, V. S.
- IV. Translations, New York

Office of Technical Services



Kallistov, O. V. and Korneeva, E. V.
A STUDY OF THE FLOW BIREFRINGENCE OF
ISOTACTIC POLYSTYRENE FILMS. [1961] (9)p.
7 refs.
Order from OTS or SLA \$1.10

62-13835

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1960, v. 2 [no. 7] p. 1056-1062.

DESCRIPTORS: *Films, *Styrenes, *Polymers,
Elasticity, Crystallization, Temperature, Photo-
elasticity, *Refractive index, Optica.

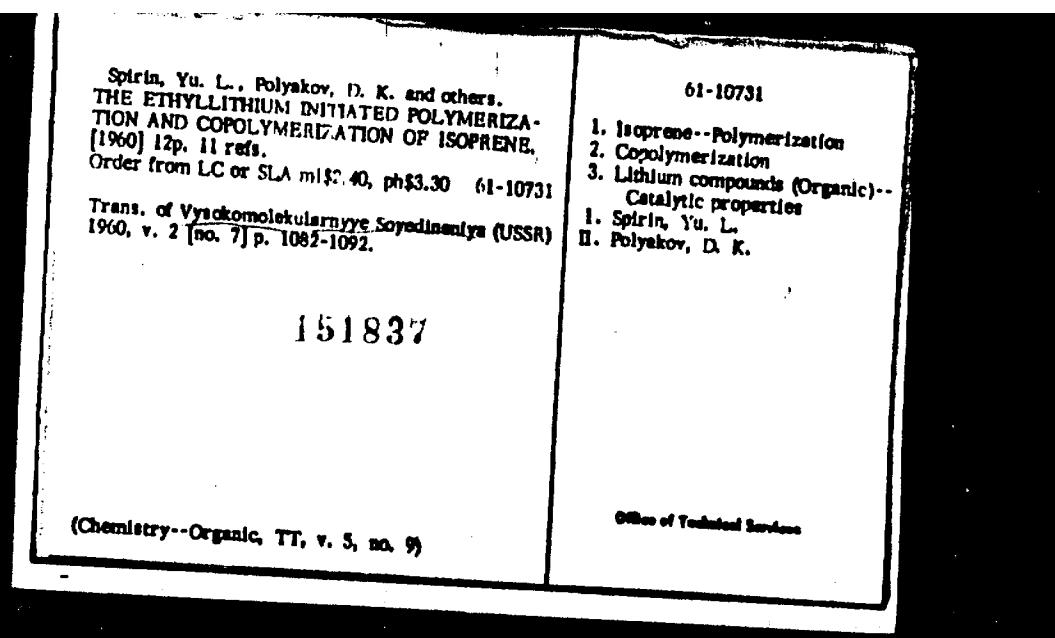
Flow birefringence and the photoelastic effect have
been found to vary with temperature in films of
stereoregular (isotactic) polystyrene in the highly
elastic state, due to the appearance of the initial
phase of crystallization. The photoelastic constant
has been found to vary with temperature in amor-
(Physics--Solid State, TT, v. 7, no. 11) (over)

62-13835

I. Kallistov, O. V.
II. Korneeva, E. V.
III. Translations, New York

Office of Technical Services

<p>Arbuza, I. A. and Sultanov, K. POLYMERIZATION OF DIVINYL ACETALS. [1960] 5p. Order from ATS \$8.50</p> <p>Trans of <u>Vysokomolekulyarnyye Soyedineniya</u> (USSR) 1960, v. 2, no. 7, p. 1077-1081.</p> <p><i>148,666</i></p> <p>(Chemistry--Organic, TT, v. 5, no. 7)</p>	<p>61-12687</p> <p>I. Acetals--Polymerization I. Arbuza, I. A. II. Sultanov, K. III. ATS-28M47R IV. Associated Technical Services, Inc., East Orange, N. J.</p> <p><i>ATS - PJ-2685</i></p> <p>Office of Technical Services</p>
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Synthesis of Unsaturated Polyamides and
Polyesters by Polycondensation at the Phase
Interface, by G. S. Kolesnikov, A. S.
Aloshnitskiy, 3 pp.

RUSSIAN, per, Vysokomolekulyarnye Soyedineniya,
Vol II, No 7, 1960, pp 1119-1121.

ATS-06M45R ATS - RJ - 2674

See

203, 214

Jun 62